



## Royal United Services Institute of Nova Scotia Dispatches 17 February 2023

*The Royal United Services Institute of Nova Scotia provides a forum for the study, promotion and debate of defence, security and safety issues.*

*Dispatches* is a weekly collection of news of interest, including posts to social media by the Institute. Links to articles are checked at the time they are put into *Dispatches* but may be unavailable at a later date or in some countries other than Canada.

Everyone is encouraged to submit links and other content to be included in *Dispatches*. Submissions and feedback are welcome anytime. Email to [RUSINSDispatches@gmail.com](mailto:RUSINSDispatches@gmail.com). Comments to articles can be from members or non-members of RUSI(NS). Any comment in *Dispatches* is the sole opinion of the author and does not necessarily represent the views of the Royal United Services Institute of Nova Scotia, the Department of National Defence or other government department, the Canadian Armed Forces, or the Royal Canadian Mounted Police or other agency.

If you wish to receive *Dispatches* at a different address (i.e., not your work address), please inform RUSI(NS). Past editions of *Dispatches* may be requested by contacting RUSI(NS).

### **RUSI(NS) Annual General Meeting**

An email was sent Monday, 13 Feb, from our Secretary, Blair Bannerman, to the membership announcing that the RUSI(NS) AGM will be held via Zoom on March 28th, 2023 at 1830 hrs. That may change to March 21st, an update will be emailed. The agenda and annual reports will be sent out in the coming weeks. The email included the zoom coordinates, meeting ID and passcode. Please test your zoom account prior to the meeting to ensure that you have the latest version and are able to sign in. If you have a question, you can contact Blair at [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

### **Events:**

To list an event in *Dispatches*, email RUSI(NS) by noon Thursday. RUSI(NS) events are by invitation. If you are interested in attending and have not been invited, email [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com). RUSI(NS) events may be cancelled at short notice. Email RUSI(NS) if there is a question of an event occurring.

**24 February**, Friday - Network for Strategic Analysis presentation "The War in Ukraine: Lessons Learned and the Future Political Settlement." 0800-1200 EST. Via Zoom. To register: <https://ras-nsa.ca/event/the-war-in-ukraine-lessons-learned-and-the-future-political-settlement/>

**7 March**, Tuesday - Georgetown University Wargaming Society presentation "Malign: Gaming Influence in the Information Age." 1800-200 EST. Online. To register: <https://www.eventbrite.com/e/malign-gaming-influence-in-the-information-age-tickets-484966807777>

**16 May**, Tuesday (was 21 February) - Georgetown University Wargaming Society presentation "The Politics of Play: Wargaming with the US Military." Noon-1400 EST. Online. To register: <https://www.eventbrite.com/e/the-politics-of-play-wargaming-with-the-us-military-tickets-415461174557>

## **Publications:**

Publications without links are available on request to [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

**New:** RUSI(NS) Presentation “Canadian Armed Forces/Department of National Defence Space” by BGen Mike Adamson, 15 February 2023,  
<https://rusi-ns.ca/caf-dnd-space/>

RUSI(NS) History & Heritage Note “Canadian Pacific Railway’s ‘Support Our Troops’ Locomotives,” by Adam Meeks, 7 February 2023,  
<https://rusi-ns.ca/locomotives/>

Royal Alberta United Services Institute presentation by Cmdre Pat Montgomery "Canada's Naval Reserve: Past, Present, and Future," 20 January 2023,  
<https://www.rausi.ca/info-events/lunch-and-learn/562-canada-a-naval-reserve-past-present-and-future>

RUSI(NS) Information Note “Types of Royal Canadian Navy Combatant Warships,” 30 January 2023  
<https://rusi-ns.ca/types-of-rcn-combatant-warships/>

RUSI(NS) Presentation “Canadian Coast Guard Autonomous Systems and Intelligence, Surveillance and Reconnaissance Program” by Scott Hatcher, 18 January 2023,  
[https://rusi-ns.ca/ccg\\_autonomous\\_systems/](https://rusi-ns.ca/ccg_autonomous_systems/)

RUSI(NS) Information Note “Armoured Fighting Vehicles,” 17 January 2023  
<https://rusi-ns.ca/armoured-fighting-vehicles/>

RUSI(NS) Information Note “RCN Ship Pennant Numbers,” 9 January 2023  
<https://rusi-ns.ca/rcn-ship-pennant-numbers/>

**New:** Canadian Marine Industries and Shipbuilding Association *On Watch*, 15 February 2023  
<https://www.cmisa.ca/cpages/on-watch-current>

Edmonton United Services Institute President’s *Enews*, February 2023

Military Institute of Windsor *Communiqué*, Volume XLI, Number 2, February 2023

Naval Association of Canada recording “Seaspan Shipyards” by Denis Stevens, VP of Government Relations for Seaspan, 9 January 2023  
[https://youtu.be/XHKH6MQa\\_eE](https://youtu.be/XHKH6MQa_eE)

Royal Alberta United Services Institute *Dispatches*, February 2023  
<https://rausi.ca/component/acym/archive/183-rausi-dispatches-february-2023>

Royal Canadian Naval Association Admiral Hose Branch *Scuttlebutt*, February 2023

Royal Canadian Navy *Your Navy Today* Volume 5 Issue 7  
<https://www.canada.ca/en/navy/corporate/navy-news/your-navy-today/volume-5-issue-7.html>

Royal United Services Institute of Vancouver Island *Newsletter*, Volume 55, 1st Quarter 2023.

**New:** Royal United Services Institute of Victoria (Australia) *Defence Update*, Volume 16, Issue 8, 13 February 2023

United Services Institute of Nanaimo and North Island *Newsletter*, Vol 31, No 1, January 2023

**New:** Veterans Affairs Canada *Salute!* February 2023  
<https://www.veterans.gc.ca/eng/about-vac/news-media/salute/2023-02>

**Tweeted by @RUSI\_NS:**

RUSI(NS) tweets may also be viewed by clicking on the Twitter icon at <https://RUSI-NS.ca>. To have something tweeted or retweeted, email [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

Canadian Coast Guard @CoastGuardCAN 8 Feb tweeted:  
News from #CentralRegion: We're #CCGProud to announce the appointment of Laurent Duvernay-Tardif as our first #CCGHonoraryCaptain. He will act as an ambassador to promote our mission and values. #BravoZulu To learn more : <https://www.ccg-gcc.gc.ca/corporation-information-organisation/honorary-captain-capitaine-honoraire-eng.html> (Canadian Coast Guard's Honorary Captain)  
RUSI(NS) retweeted: "An Honorary Captain is a celebrated and well-known Canadian that is selected to be an ambassador for the Canadian Coast Guard because their unique set of skills, values, and goals exemplifies our own commitment to serving Canadians."

*Aside:* Honorary Navy Captains program  
<https://www.canada.ca/en/navy/corporate/community-support/honorary-navy-captains.html>)



**Armoured Trains**

Armoured trains are not just part of history, they are part of modern operations. So, how do military planners factor them into plans?

Hmm, is there room to bring back 'train-busting'?



NEXTA on Twitter ([https://twitter.com/nexta\\_tv/status/1625166858776199174](https://twitter.com/nexta_tv/status/1625166858776199174)): "Putin started using an armored train All because the plane can be easily tracked, but the train is not. The train travels at maximum speed and without stops. The train has a bedroom and office, as well as separate railcars for security escorts and special communications. 1/3 <https://t.co/ybLnjntEpg>" /  
Putin's train also differs from the passenger train externally: it has more antennas, and the railcars are pulled by three locomotives at once. The cars themselves are six-axle, indicating that it is armored. 2/3  
The armored train was designed back in 2014-2015, but it did not arouse much interest in Putin until the Kremlin began preparing to invade Ukraine. He now uses the train mainly to travel around Russia and to get to his residence in Valdai. 3/3

Read the tweet thread. The matter was a great cause for all sorts of memes and comments. Look carefully at the telephone of the desk to the right of the picture.

This may be the article from which NEXTA got its tweet: That extra-heavy load Instead of flying, Vladimir Putin prefers to travel around Russia by armored train (allegedly for fear of Ukrainian attack) <https://meduza.io/en/feature/2023/02/13/that-extra-heavy-load>

### **Posted on Facebook “Royal United Services Institute of Nova Scotia”:**

RUSI(NS) postings may also be viewed by clicking on the Facebook icon at <https://RUSI-NS.ca>. To have something posted or commented, email [RUSINovaScotia@gmail.com](mailto:RUSINovaScotia@gmail.com).

#### **Each day, President Zelenskiy reads my book on military history. I hope he heeds these warnings**

<https://www.theguardian.com/commentisfree/2023/feb/10/president-zelenskiy-book-military-history-ukraine-war-putin>

Three 'warnings' from history that are relevant to the conflict in Ukraine:

1. leave strategy to the most talented generals;
2. overpromising in war can have catastrophic consequences; and
3. make sure just what constitutes victory is clear.



#### **China pulls back from global subsea cable project as US tensions mount**

<https://www.ft.com/content/8f35bf1e-fe32-4998-9e13-a13bac23506d>

"Around 95 per cent of all intercontinental internet traffic — data, video calls, instant messages, emails — is transmitted via more than 400 active submarine cables that extend for 1.4mn km. The infrastructure has come under scrutiny amid global concerns around espionage, because the stations where cables land are seen as vulnerable to interception by governments, hackers and thieves."

"Several western security experts said China's recent data security law — which mandates that domestic companies and institutions share data with the government if the information in question pertains to matters of national security — suggests that data operated by Chinese companies could be vulnerable to state interception."

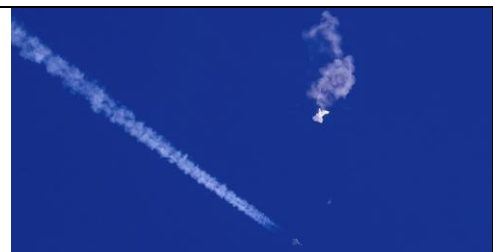
A convergence of economic and subsea 'warfares.'



#### **Why wasn't the suspected Chinese spy balloon shot down over Canada?**

<https://www.ctvnews.ca/sci-tech/why-wasn-t-the-suspected-chinese-spy-balloon-shot-down-over-canada-1.6262580>

"With a normal service ceiling of around 50,000 feet, Canada's aging CF-18 fighter jets might have had trouble



reaching the balloon, which was reportedly travelling at altitudes of around 60,000 feet."

If the CF188 Hornet fighter aircraft is limited to 50,000 feet maximum altitude, what Canadian forces can take on threats and concerns above that? Will the F-35 Lightning II, to replace the Hornets are part of the Future Fighter Capability project, and which apparently has "a reported service ceiling of above 50,000 feet," be able to take on the anti-balloon role?

RUSI(NS) is hosting the Commander of the 3 Canadian Space Division as Distinguished Speaker 15 February 2023. A question that may arise is what is the dividing line between air and space, that is, where does the 'area (volume?) of responsibility' for the Commander start?

"A common definition of space is known as the Kármán Line, an imaginary boundary 100 kilometers (62 miles) above mean sea level. In theory, once this 100 km line is crossed, the atmosphere becomes too thin to provide enough lift for conventional aircraft to maintain flight." Though there is now discussion that the Kármán Line is actually 50 to 80 kilometres altitude. Hmm, may depend on the design of the 'conventional aircraft.'

### **Float and Dagger: Espionage as Probing Maneuver**

<https://providencemag.com/2023/02/float-and-dagger-espionage-as-probing-maneuver/>

"My inexperienced suspicion finds more credible support in an idea advanced by a US Naval War College colleague, James Holmes, in a sobering essay in 1945

(<https://www.19fortyfive.com/2023/02/that-downed-chinese-balloon-wasnt-exactly-for-spying-it-was-a-trial-balloon/>). Holmes submits that Beijing's chief reason for floating a balloon over North America was to observe the response from the US government, military, and, just as importantly, the American people. They will leverage what they've learned, Holmes asserts, to sharpen their "three warfares" strategy, China's 'all-consuming effort to shape the political and strategic environment in its favor by deploying legal, media, and psychological means.'"

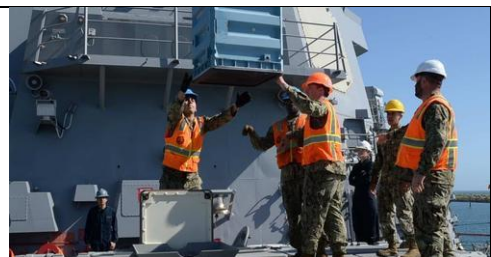
James Holmes holds the J. C. Wylie Chair of Maritime Strategy at the US Naval War College and is always worth reading.



### **At-Sea Rearming Deemed A "Main Priority"**

<https://www.navalnews.com/naval-news/2023/02/at-sea-rearming-deemed-a-main-priority-by-secnav/>

"In a wartime scenario, ports may not be accessible or safe to permit the reloading of vertical launch system (VLS) cells, leaving Navy warships empty in a high-end fight."



The lack of safe ports for rearming and other re-supply could be a significant issue during conflict at extended distances from usual (home) bases. The lack could either be because the ports have been struck or are threatened by the enemy, or have been made unavailable by local states. The US Navy addressed this issue during World War II in the Pacific by developing a huge fleet train (supply and service vessels) that moved forward close behind the fighting forces. Canada may face the same issue, as in recent decades it has routinely deployed (a current strategy?) individual and groups of ships much more globally. Can current and future logistics resources such as the future Protecteur-class

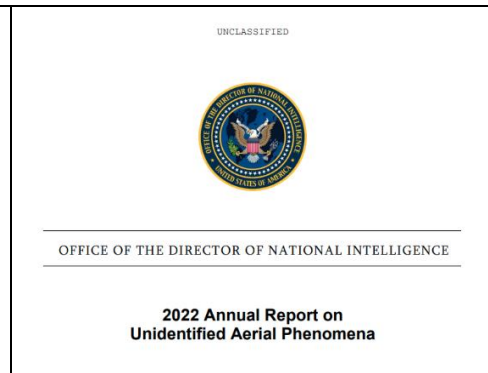
replenishment oilers being built by the Joint Support Ship project be modified to undertake at-sea rearming? Will future VLS-equipped combatants such as the warships to be built by the Canadian Surface Ship project be capable of at-sea rearming?

**US Office of the Director of National Intelligence  
"2022 Annual Report on Unidentified Aerial Phenomena"**

<https://www.dni.gov/files/ODNI/documents/assessments/Unclassified-2022-Annual-Report-UAP.pdf>

Of 366 newly-identified UAP (Unexplained Aerial Phenomena) reports, 163 were characterized as balloon or balloon-like entities.

Hmm, looks like 'balloon response operations' may become an increasing role for government agencies...



**The U-2S Dragonlady - a Solid Elint Workhorse**

<https://medium.com/the-dock-on-the-bay/the-u-2s-dragonlady-a-solid-elint-workhorse-a560655ae4f3>

Reading this article, one wonders whether the Royal Canadian Airforce Remotely Piloted Aircraft System, as the project progresses, includes as a requirement the capability to intercept Unexplained Aerial Phenomena, whether they be balloons or other, identify them, monitor them (with ELINT - electronic intelligence equipment?) and, if necessary, down (destroy) them.

See: RUSI(NS) presentation "Uncrewed Aerial Vehicles – Canadian and US Programs (<https://rusi-ns.ca/rpas/>)



**NORAD's value is on full display as flying objects shot down over North America**

<https://theconversation.com/norads-value-is-on-full-display-as-flying-objects-shot-down-over-north-america-199829>

"NORAD has three missions:

1. It warns and tracks air objects of concern (aerospace warning).
2. It can defeat (in other words, shoot down) these objects or escort them out of national airspace (aerospace control).
3. It tracks maritime vessels approaching North America that may be of concern (maritime warning)."

"If there's any silver lining to the events of the past few weeks, perhaps it's that North Americans will now recognize and appreciate the role NORAD plays in keeping them safe."

Presentation to RUSI(NS) February 2021: "NORAD Modernization: Enabling Forward Operations" (<https://rusi-ns.ca/norad-modernization/>)



**Welcome to the dark side: The rise of tanker shipping's 'shadow fleet'**

<https://www.hellenicshippingnews.com/welcome-to-the-dark-side-the-rise-of-tanker-shippings-shadow-fleet/>

"Older tankers that pollute more and are less safe to operate would normally go to the scrapyards for recycling and be replaced by modern, more efficient vessels. But why scrap them when they can earn huge premiums in sanctioned or semi-sanctioned trades?"



Is Canada prepared to undertake the legal and practical measures to search, track and intercept shadow fleet tankers in accordance with sanctions and international regulations? Maybe the trade isn't near Canada, but Royal Canadian Navy frigates routinely deploy worldwide and could find themselves in situations where boardings, etc., of shadow tankers are possible.

**Chinese cameras leave British police vulnerable to spying, says watchdog**

<https://www.theguardian.com/world/2023/feb/15/chinese-cameras-leave-british-police-vulnerable-to-spying-says-watchdog>

"British police are leaving themselves open to spying by Beijing because of their reliance on Chinese-made cameras..."



How reliant are Canadian police and security services on Chinese-made cameras and other surveillance equipment? Are we making ourselves increasingly vulnerable to the adversarial and 'Big Brother' state that is China?

**Other Sources:**

**#Arctic**

Climate Change, Arctic Security, and Allied Strategy: A Strategic Analysis

<https://wavellroom.com/2023/02/06/climate-change-arctic-security/>

Climate Change, Arctic Security, and Allied Strategy: A Strategic Analysis

<https://wavellroom.com/2023/02/06/climate-change-arctic-security/>

**#balloons** (just because?)

The Chinese Surveillance Balloon: Blown Out of Proportion?

<https://rusi.org/explore-our-research/publications/commentary/chinese-surveillance-balloon-blown-out-proportion>

Russia Also Has A Fleet Of Spy Balloons

*A detailed description:* <https://www.thedrive.com/the-war-zone/russia-also-has-a-fleet-of-spy-balloons>

U.S. Scrambles To Get A Handle On Mysterious Aerial Incursions (Updated)

<https://www.thedrive.com/the-war-zone/u-s-scrambles-to-get-a-handle-on-mysterious-aerial-incursions>

### **#Arctic**

Solving Communications Gaps in the Arctic with Balloons

<https://cimsec.org/solving-communications-gaps-in-the-arctic-with-balloons/>

### **#Russia-Ukraine War**

Balloons Shot Down Over Ukraine Point To New Russian Tactics

<https://www.thedrive.com/the-war-zone/balloons-shot-down-over-kyiv-point-to-new-russian-tactics>

### **#space #intelligence**

Why stratospheric balloons are used in era of space-based intelligence

<https://www.c4isrnet.com/battlefield-tech/space/2023/02/06/how-stratospheric-balloons-could-complement-space-based-intelligence/>

### **#Canadian Armed Forces**

Lt.-Gen. Michel Maisonneuve (ret'd): Once again, Canada fails on the world stage

<https://nationalpost.com/opinion/once-again-canada-fails-on-the-world-stage>

### **#defence industry**

State of Canada's State of Canada's Defence Defence Industry Industry Report

<https://www.defenceandsecurity.ca/UserFiles/Uploads/publications/reports/files/document-39.pdf>

### **#drones**

Why drone boats are an overhyped Achilles' fleet

<https://thebulletin.org/2023/02/why-drone-boats-are-an-overhyped-achilles-fleet/>

### **#legal**

The Legal and Practical Challenges of Surrendering to Drones

<https://lieber.westpoint.edu/legal-practical-challenges-surrender-drones/>

### **#hybrid warfare #NATO**

What is hybrid warfare? Inside the centre dealing with modern threats

<https://www.bbc.com/news/uk-64511670>

### **#Indo-Pacific**

Russia-Ukraine war: China watching very closely to wargame Taiwan

Mick Ryan: <https://www.smh.com.au/world/europe/how-china-is-using-ukraine-to-wargame-taiwan-20230206-p5ciao.html>

Taiwan: Invasion is not likely, but deterrence remains vital

<https://www.geostrategy.org.uk/research/taiwan-invasion-is-not-likely-but-deterrence-remains-vital/>



### **#information operations #media operations**

Sailors, soldiers need skills to fight propaganda, Navy's Cleary says

<https://www.c4isrnet.com/information-warfare/2023/02/14/sailors-soldiers-need-skills-to-fight-propaganda-navys-cleary-says/>

*Leads one to wonder what the CAF media literacy efforts are.*

### **#NATO #naval operations**

NATO's Navies Must Get the Balance Right

<https://www.usni.org/magazines/proceedings/2022/december/nato-navies-must-get-balance-right>

### **#naval operations**

The Promise and Pitfalls of Underwater Domain Awareness

<https://warontherocks.com/2023/02/the-promise-and-pitfalls-of-underwater-domain-awareness/>

### **#Russia**

Corruption in the Russian Armed Forces

<https://rusi.org/explore-our-research/publications/commentary/corruption-russian-armed-forces>

### **#Russia-Ukraine War**

This Is How Long It Would Really Take Ukraine's Pilots To Convert To F-16s

<https://www.thedrive.com/the-war-zone/this-is-how-long-it-would-really-take-ukraines-pilots-to-convert-to-f-16s>

What Russia Got Wrong - Can Moscow Learn From Its Failures in Ukraine?

<https://www.foreignaffairs.com/ukraine/what-russia-got-wrong-moscow-failures-in-ukraine-dara-massicot>

Can Putin win?

<https://www.politico.eu/article/can-vladimir-putin-ukraine-war-volodymyr-zelenskyy-donbas-chemical-weapons-win/>

Along Ukraine-Belarus border, a war of nerves — and drones

<https://www.stripes.com/theaters/europe/2023-02-03/ukraine-belarus-border-drones-war-9029362.html>

The War's Violent Next Stage

<https://www.nytimes.com/interactive/2023/02/10/world/europe/russia-ukraine-offensives-maps.html>

Losing as Winning: Putin's Developing Narrative of Victory

<https://defenceindepth.co/2023/02/15/losing-as-winning-putins-developing-narrative-of-victory/>

Moscow's Military Capabilities Are in Question After Failed Battle for Ukrainian City

<https://www.nytimes.com/2023/02/15/world/europe/russia-military-vuhledar-ukraine.html>

### **#armour**

Western tanks will bring their own complexities to Ukraine's fight against Russia

<https://www.aspistrategist.org.au/western-tanks-will-bring-their-own-complexities-to-ukraines-fight-against-russia/>

Armata – the story is over

<https://wavellroom.com/2023/02/10/armata-the-story-is-over/>

*The importance of a good engine. Lessons, too, in design and manufacturing.*

### **#artillery**

Glass Cannons from Grozny to Mariupol: What Should the US Military Learn from Russia's Use of Artillery in Protracted Urban Sieges?

<https://mwi.usma.edu/glass-cannons-from-grozny-to-mariupol-what-should-the-us-military-learn-from-russias-use-of-artillery-in-protracted-urban-sieges/>

### **#drones**

Starlink Limits Ukraine's Maritime Drones At Time Of New Russian Threat

<https://www.navalnews.com/naval-news/2023/02/starlink-limits-ukraines-maritime-drones-at-time-of-new-russian-threat/>

DIA Report on Iranian UAVs in Ukraine

<https://news.usni.org/2023/02/14/dia-report-on-iranian-uavs-in-ukraine>

### **#intelligence**

Russia's War in Ukraine: Military and Intelligence Aspects

<https://crsreports.congress.gov/product/pdf/R/R47068>

### **#security**

Munich Security Report

<https://securityconference.org/en/publications/munich-security-report/>

*The annual Munich Security Conference kicks off with a review of the latest Munich Security Report, which was released this week. The topline reads: "The world's liberal democracies are awakening to the challenges posed by autocratic revisionists, and have taken the first important steps to pushing back. But for liberal-democratic principles to prevail over the autocratic variants, democracies must revamp their vision of a desirable international order."*

### **#space**

The Growing Complexity of Space: Implications for Security and Stability

[https://lop.parl.ca/sites/PublicWebsite/default/en\\_CA/ResearchPublications/202210E](https://lop.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/202210E)

From the Sea . . . To Outer Space: The Command of Space as the Foundation of Space Power Theory

<https://blog.usni.org/posts/2022/09/17/on-midrats-18-september-2022-episode-635-mid-september-melee>

*Check the citations in this article – interesting list.*

Should Space Force Look at the Moon or the Earth? *James Holmes, strategist well worth reading:*

[https://www.realcleardefense.com/articles/2023/01/30/should\\_space\\_force\\_look\\_at\\_the\\_moon\\_or\\_the\\_earth\\_878549.html](https://www.realcleardefense.com/articles/2023/01/30/should_space_force_look_at_the_moon_or_the_earth_878549.html)

*One info-verse comment: Not a choice. The answer is both. We need to stop casting them as opposites, or in competition as doctrinaire schools of thought. Both Alfred and Julian hated that.*

## **#strategy**

Strategy: Some Notes for a User's Guide

<https://www.militarystrategymagazine.com/article/strategy-some-notes-for-a-users-guide/>

## **#veterans**

Rehab contract sparks fresh battle between veterans and the Liberal government

<https://www.thestar.com/politics/2023/02/12/rehab-contract-sparks-fresh-battle-between-veterans-and-the-liberal-government.html>

## **#warfare**

How the Ukraine war is shaping US planning for a China conflict

<https://apnews.com/article/russia-ukraine-taiwan-politics-china-8a038605d8dd5f4baf225bdaf2c6396b>

Generally applicable lessons:

- 1 arm in advance
- 2 stockpile woes
- 3 rebuilding takes time
- 4 space as a front line
- 5 be ready for cyberwar

## **#wargaming**

IWP students and alumni practice exercising tools of statecraft in the South China Sea

<https://www.iwp.edu/students-alumni/2022/01/13/iwp-students-and-alumni-practice-exercising-tools-of-statecraft-in-the-south-china-sea/>

## **Other:**

**Scandinavian Journal of Military Studies** Special Collection "Military exercises and wargaming in professional military education"

<https://sjms.nu/collections/8>

contents:

Wargaming and The Cycle of Research and Learning

The Use and Misuse of Wargames

Wargaming Dos and Don'ts – Eight Lessons for Planning and Conducting Wargames

Professional Knowledge through Wargames and Exercises

Developing Strategic Mindsets with Matrix Games

To Learn or not to Learn: On the Importance of Mode Switching in Educational Wargames

Learning (Better) From Stories: Wargames, Narratives, and Rhetoric in Military Education

Wargaming for the Purpose of Knowledge Development: Lessons Learned from Studying Allied Courses Of Action

Simulation-Supported Wargaming for Assessing Force Structures

Security Affairs Committee Synopsis

### **General**

The world has changed in many ways partly because of the pandemic. The war in Ukraine, the rise in authoritarianism, climate change, global supply chain failure and re-alignment, and the general loss of trust in global relations around the world. These are unpleasant and far reaching issues that do not have easy solutions and are unlikely to be solved in our life time.

One of the changes involves the relationship between the "key" authoritarian states, China, Russia and Iran being the main players with the assistance of the governments of North Korea and Belarus, but also non-state actors such as the Taliban in Afghanistan and Pakistan, and Al Qaeda in all its forms across Asia and Africa. It will be these relationships that will affect world affairs. It will be their general opposition to the rules-based system of trade and governance used in global trade and relationships that has been enjoyed since the Second World War. China has now taken the lead in this group, eclipsing the Russian Federation which seems to be destroying itself by increasingly poor decisions. Is China actually ready for such a role? Maybe but maybe not as they are increasingly self-centered and combative with neighbours. Time as per normal will tell if this will be a successful role for an authoritarian regime.

China under the Communist Chinese Party seems set to be the world leader of this particular group. This group of authoritarian nations is not alone. Many countries in Asia and Africa have chosen to be neutral in regard to the Russia-Ukraine war and have taken advantage of the situation to get access to cheaper oil and gas. This trend will continue - debt diplomacy, cheap loans, access to inexpensive expertise and continued access to cheaper oil and gas are draws to non-aligned and poorer nations. This shows at the United Nations, the African Union and other organizations when votes are counted with these nations abstaining or voting with the authoritarian regimes. This is likely to continue in the future. The West no longer has the same appeal as it once did but are the "new" alternatives better? Probably not, but...

## **O Canada**

The Minister of Innovation, Science and Industry, Francois-Philippe Champagne announced that Ottawa has instructed the Canada Foundation, responsible for screening funding requests, to scrutinize funding requests from Canadian universities that are collaborating on sensitive research. This was reported in the Globe and Mail article by Robert Fife and Steve Chase on 14 February 2023. One of the issues is the extensive reach of the Peoples' Liberation Army into virtually all their universities and labs. The National University of Defence Technology is vast, including both campuses and labs throughout China. China also tends to take a comprehensive approach to gaining access to foreign technology, using whatever means that are available. Still, Minister Champagne's action is a step in the right direction though only a start.

In order for this to work, all universities need to have a start state. An audit should be considered of how much and the nature of the research lost. The security services and funding bodies can better understand the full nature of the threat and take appropriate measures. It is a pity that it has taken so long for the Canadian Government to react to this threat; it has been known for well over a decade.

The balloon hullabaloo has taken centre stage for the past week and a bit. At present four balloon-like objects have been eliminated by US F-22 fighter aircraft using AIM-9X missiles. One missile missed so not perfect. The wreckage of the first balloon has been mainly recovered off the Carolina coast, but the other sites are proving more difficult to find. The object shot down in Canadian airspace was supposedly cylindrical in shape and not the same as the first object. It was embarrassing to see both the Minister of National Defence and the Prime Minister try to put a "brave face" on what is clearly a failure of the Canadian Armed Forces to be able to do the bare minimum to protect our air space and consequently Canadian sovereignty. It was later announced that Canada didn't even have the necessary missiles for our fighters and that 36 had been ordered but not delivered as yet, according to Global News. One has to wonder why 36? We allegedly have 76 working CF188 at present - are we no longer arming our fighters effectively?

The incident also brings up the very real issue of the state of the North Warning System and Canada's lack of participation in the ballistic missile defence system. It seems that the reluctance is based more on image than the practical reality. It is a symptom of Canada's minimalist attitude towards defence but also not only of ourselves but of our allies. The other issue that will impact us is the arrival of the F-35 which is delicate and needs a well-equipped and maintained airfield. It means the northern forward operating airfields are largely unsuitable for their deployment as the fields are more rustic. Canada needs a northern joint force base that is fully equipped for full scale operations. Our sovereignty depends on a robust answer - doing nothing is no longer an option.

### **United States**

The fallout from the balloon issue continues although Nation Security Council spokesman John Kirby, stated that only the balloon shot down off the South Carolina Coast was a definite surveillance craft. The other three objects are thought to be benign and may be simply weather balloons.

Former UN ambassador Nikki Hailey has officially announced that she is running for the Republican nomination for president. She is the second candidate after former President Donald J. Trump to put a hat into the ring. The former president has lately had a number of court cases set to proceed against him in civil court. The Department of Justice is apparently deliberating on criminal charges as well. It should cause some fireworks over the coming weeks and may encourage other possible candidates to run as well. The current Governor of Florida, Ron DeSantis, is expected to announce his candidacy in the coming months.

### **Iran**

Demonstrations have slowed although they are not stopped completely. The opposition is largely leaderless, but recently a new group from outside of Iran proper has brought together key opposition groups including Kurds, Baluchi and Arabs along with monarchists, republicans and leftist groups into a single external opposition group. It also has connections within the country itself. It may provide a framework from which to build an actual workable opposition, something that has been lacking to date. It should be noted that there is ongoing infighting between various opposition groups. This has been an ongoing issue since the Islamic Revolution 43 years ago. Information was published by the "ABC.net" and written by Nissim Khadem on 13 February 2023.

President Raisi visited Beijing and met Chinese Vice-Premier Li Keqiang. Iran and China are seeking to undo some of the effects of US, UK and EU sanctions as well as providing moral support for Iran's nuclear ambitions. It is expected that China and Iran are more likely to increase their trade and international relationship in an effort to thwart Western trade actions.

Apparently the new leader of Al Qaeda, Saif al-Adel, has set up the latest headquarters in Iran, according to Global Security. This will allow him to live a relatively safe life style under the protection of the Iranian regime. The new leader is a former member of the Egyptian Special Forces and has been involved in some of the most successful Al Qaeda operations in their history including embassy bombings in Tanzania and Kenya in the early 90s. With the protection of Iran and freedom of movement, al-Adel could become better able to run future operations. Still, a mainly Sunni organization within the heart of Shia Iran is very different especially as Al Qaeda has not always been well disposed towards Shia minorities. It is an interesting turn of events and practice.

### **Moldova**

Moldova's government under Prime Minister Natalia Gavrilita resigned on 10 February 2023 after a year and a half in power. The former Prime Minister stated that it was the ongoing pressure of the economy and the serious security threat which caused her to resign. The former Minister of the Interior and defence advisor, Dorin Recean, has been nominated as the new Prime Minister. He has 15 days to form his new government.

Moldova has been under threat from Russia since the start of the latest round of fighting in Ukraine. Russia has about 1800 troops in the Transnistria region and there is a local militia of about 6k soldiers plus light equipment including reconnaissance vehicles and armoured personnel carriers. Moldovan security and Ukraine have both indicated that Russia will attempt to replace the pro-Western government of President Maia Sandu using saboteurs from various nations including Russia, Belarus, Serbia and Montenegro. Moldova closed its airspace on Tuesday as a preventative measure. Moldova has also requested air defence equipment and training for Moldovan forces. The information seems possible. In March of last year, President Lukashenko was televised showing the overall Russian operation proposed as of that time. His briefing clearly showed that Moldova was a Kremlin target, so is the Kremlin likely to stop if they are successful in Ukraine?...likely not.

### **Belarus**

Belarus forces are this week conducting a series of high profile exercises including special forces and air assault troops along the Polish border. The media was invited to attend the exercises and the Belarussian military spokesman stated that they wouldn't attack anyone but did not rule out a counter-attack if Belarus itself was attacked. Russia still has troops inside Belarus, the exact numbers are unknown at present but could be as low as 8k. Russia did bring in up to 30k for earlier exercises but at least some of these have returned to other locations.

Participation of Belarus in the war is likely small. Lukashenko and therefore Putin are well aware that any attack by Belarus on Ukraine would likely result in major civil disruption and possibly regime change. Given Russia's current outlook, there is a possibility that they could create a false flag incident. This is not likely to work and the population including security forces may intervene against Russian and Lukashenko regime forces thus causing a second front requiring large numbers of troops. It is likely that Belarus will continue to put on a display of forces thus forcing Ukraine to keep some of their forces in place along the Ukraine-Belarus border. The terrain is not suitable for an attack which would fail given the size of forces available in Belarus at present.

### **Russia-Ukraine War**

One of the biggest mysteries coming out of the war to date is the bombing of the two Nord Stream pipelines. Several countries including Denmark and Sweden have conducted investigations of the incident. The investigations have concluded that the pipelines were blown up by sabotage, but the investigators have drawn no conclusion as to who may have conducted the actions. Recently an investigative journalist, Seymour Hersh, stated that the pipeline was destroyed by the US Navy. This has been seized upon by Russia as requiring an investigation into the actions of the US. It is also handy as a possible means to divide the Western alliance. Seymour Hersh became famous with his expose into the My Lai massacre during the Viet Nam war. He is now 85 and has been noted for having developed a theme of conspiracy theories especially involving the US. The problem is there is no evidence to suggest the US did do it although it had some motivation. The western theory was that it was a Russian false flag operation meant to show its determination and capabilities. This argument will likely last longer than the war and be one of those undying long term conspiracies just like the Kennedy assassination.

Russia recently attacked Ukraine with 71 missiles comprising X 101, X 555 and Kalibre types. The X series weapons were fired from long range aviation, the Kaibre missiles by warships and submarines of the Black Sea Fleet. 61 missiles were allegedly shot down. The missiles that did hit were against civilian utility stations causing blackouts in the east of the country.

The war itself has turned into a slow moving bloodfest for both sides but with observers stating that Russian losses are seven to eight times the Ukrainian fatalities. Russia is estimated to be averaging over 800 fatalities per day in recent fighting with last week's total fatalities for Russia exceeding 6k. This means Ukraine is still losing over 800 fatalities per week plus wounded, captured or missing which is two to three times the fatality rate. Ukraine does seem to have a better casualty evacuation system which likely means a greater survival rate for injured troops. Despite the losses, Russia appears to be making slow but steady progress all along the front. Ukraine has made several counter attacks which have achieved some success around the Bakhmut area. There is concern that Bakhmut may fall in the not too distant future.

Bakhmut is of limited strategic value and Russian ongoing attacks seem to make little sense. One and only one YouTube contributor has suggested that it is because of Russian logistics which have proven to be inflexible. The Bakhmut area appears to have the best rail and road connections for logistics and hence the ongoing attacks, simply because they have the roads and rails to do it. Ryan MacBeth produces an interesting series that looks at systems and training on YouTube which is worth watching.

Most of the fighting has occurred in the area of Bakhmut and Vuhledar. Media video reports show essentially human wave attacks by Russians even at night with some artillery fire support but few armoured vehicles. The result is as can be expected, brief and brutal. Casualty evacuation is non-existent and few stick around for a second shelling. Ukrainian troops are well dug in fortified trenches and buildings. It is brutal to even watch. More recently there have been increasing reports of in-fighting amongst Russian units some of which was videoed by Ukrainian troops. The diverse nature of Russia combined with a sense of racial superiority over the citizens of autonomous regions makes for a toxic mix.

There is considerable debate whether the Russians have started their offensive as yet. Satellite imagery seems to show no major concentrations to add to the ongoing attacks in the east. NATO leadership believes that it has and that the ongoing call up of troops is steadily being fed directly into battle to cover losses. The call ups seem to be continuing non-stop despite making the 300k goal. Russia has limited ability to manufacture sufficient equipment for large numbers so the only item they have in quantity is men. Training is minimal and usually conducted in under two weeks at present according to Russian prisoners.

Russia has sortied most of its nuclear submarines within the last few days. It is likely for exercises but it is also a show of force to NATO and its allies. One Russian submarine will not be there as the last of the Typhoon-class was laid up. The *Dmitry Donskoy* was used as the test bed for the Bulava missile which has become the main armament of the Borei- and Borei A-class submarines. It was the last of a seven boat class although one was not completed. Three of the six have been broken up with a further two in various stages of disposal at present. The *Dmitry Donskoy* is laid up awaiting a disposition in the Northern Fleet. It is the end of an era. The largest submarine in the world is now the Russian special mission submarine *Belgorod*, over 600 feet long, and 30k tons submerged, capable of carrying the special nuclear torpedo Poseidon, research drones and special nuclear research submarines. The Poseidon system is capable of destroying coastal infrastructure by a nuclear blast causing a major tsunami which would cover most coastal regions with contaminated water. A true end-of-the-world capability.

## China

The fallout from the balloon fiasco has had a major effect on China-US relations including the postponement of the visit of the US Secretary of State, Anthony Blinken. China has stated that the US has flown ten balloons over Chinese territory in the last year. It also criticized the US reaction to the problem plus drew attention to a recent derailment in the US with a subsequent fire. This is a normal tactic to distract from the real issue.

According to a report from "Lei's Real Talk," discussing the Near Space Force and the creator of the highly sophisticated balloon surveillance system, the balloons were the work of the Peoples' Liberation Army, the Force is considered a separate organization on the level of the Army or Navy. The PLA started a program to exploit the area between 24k metres to 100k metres. It is the transition between aerial space and the area considered space. It is free of most debris and problems of other objects found below and above the this transitional area of the atmosphere.

China has developed several craft to create the conditions to exploit this area of the atmosphere. Most are large craft capable of carrying significant payloads. One was over 100m long and circum-navigated the globe.

Wu Zhe is the creator of the new craft and number 1 expert on stealth technology. Main stake holder are four of six companies recently sanctioned by the US. His education was entirely in China. He has no familiarization with the west.

The Near Space Force headquarters is situated on Hainan Island. Its goal is to exploit the advantages of the transitional space, target foreign countries for espionage and if the war breaks out, provide targeting 24/7 along the Straits of Taiwan. Low cost, minimal sophistication, low technology. Allegedly they can launch thousands of balloons towards the US because of the low cost. One issue is the amount of helium required which may be a serious constraint on such an act.

The Near Space Force is an interesting concept and does provide the Chinese forces with an impressive technology that is currently not available to Western forces. The YouTube video to Lei's Real Talk can be found at: <https://www.youtube.com/watch?v=TSxOcRS66G8>

A Chinese coast guard vessel lased a Philippine patrol vessel on a re-supply mission to Second Thomas Shoal in the Spratley Island Chain where the Philippine Marines are manning an ancient former Landing Ship Tank that has been run aground on 10 February 2023. The report stated that the bridge crew was blinded by a military-grade laser fired from a Chinese Coast Guard vessel.

In a second event, China and India are locked in a low level conflict along the Line of Actual Control created after the 1962 war. China currently has 120k men on or within 60 kms of this frontier with tanks, artillery, radar, fighters and helicopters, as well as ongoing development of bases and other infrastructure to support Chinese efforts to push within the area of Ladakh, the Galwan Valley area and Arunachal Pradesh. China is attempting to push farther into Indian territory, claiming historic ownership resulting from the post war period. India itself maintains more than 70k troops with similar equipment. Kashmir is part of the overall issue with both the Chinese and Pakistan. Kashmir is divided between Pakistan and India, and China has generally supported Pakistan's efforts. All three countries have extensive nuclear arsenals. It should be mentioned that China has also claimed and occupied portions of Bhutan and Nepal as well.



China's medical efforts after the end of Covid lockdowns have been largely a disaster noted by the citizens of China. Demonstrations continue throughout the country over the efforts of the party or lack thereof. Morgues and crematoria are still over capacity without much sign of easing in the near term. Unlike previous events, this general situation is sticking to the CCP. Chinese citizens are not happy, unemployment is high, banks are failing and property ownership is collapsing along with middle class savings. This is a "black swan event" that could cause a major disruption in the economy and for the survival in the long term for the Party itself. China continues to pour more money into the already overstocked infrastructure that is not needed in order to support property developers. The Chinese economy continues to suffer storms as a result. No long-term solution is in sight at this time. Western investment companies are eager to return to the Chinese market but now is not the time.



CANADIAN FORCES INTELLIGENCE COMMAND  
COMMANDEMENT DU RENSEIGNEMENT DES FORCES CANADIENNES

**RUSSIA'S CLAIM:**

Russia claims that ammunition shortages will result in the collapse of the Ukrainian Armed Forces by the end of March.

**BASED ON CANADIAN FORCES INTELLIGENCE COMMAND ANALYSIS:**

- Ukrainian forces continue to inflict heavy losses on attacking Russian elements, in particular around the towns of Bakhmut and Vuhledar.
- Russia has faced its own serious ammunition pressures during the war, and has had to turn to its few foreign partners to maintain supplies of several munition types.
- Russian disinformation efforts often project Russian operational difficulties onto the Ukrainian side, and their forces in Ukraine are very likely currently grappling with their own sustainment problems.



## INTELLIGENCE UPDATE

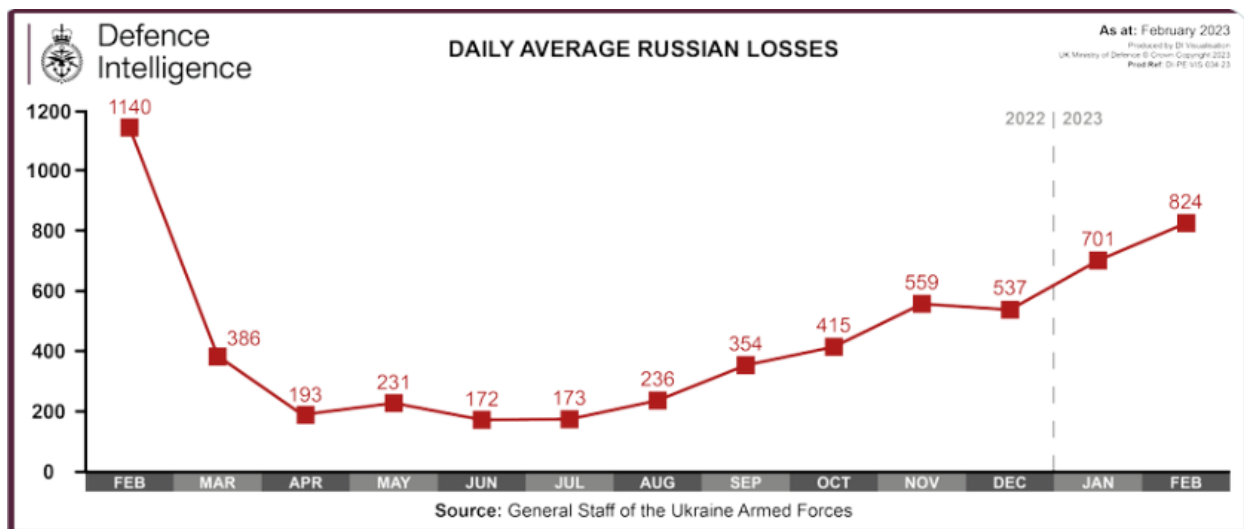
- Since 7 February 2023, Russian forces have likely made tactical gains in two key sectors. On the northern outskirts of the Donbas town of Bakhmut, Wagner Group forces have pushed 2-3km further west, controlling countryside near the M-03 main route into the town. Russian forces increasingly dominate the northern approaches to Bakhmut.
- To the south, Russian units have made advances around the western edge of the town of Vuhledar, where they re-launched offensive operations in late January 2023.
- However, Russian units have likely suffered particularly heavy casualties around Vuhledar as inexperienced units have been committed. Russian troops likely fled and abandoned at least 30 mostly intact armoured vehicles in a single incident after a failed assault.

## INTELLIGENCE UPDATE

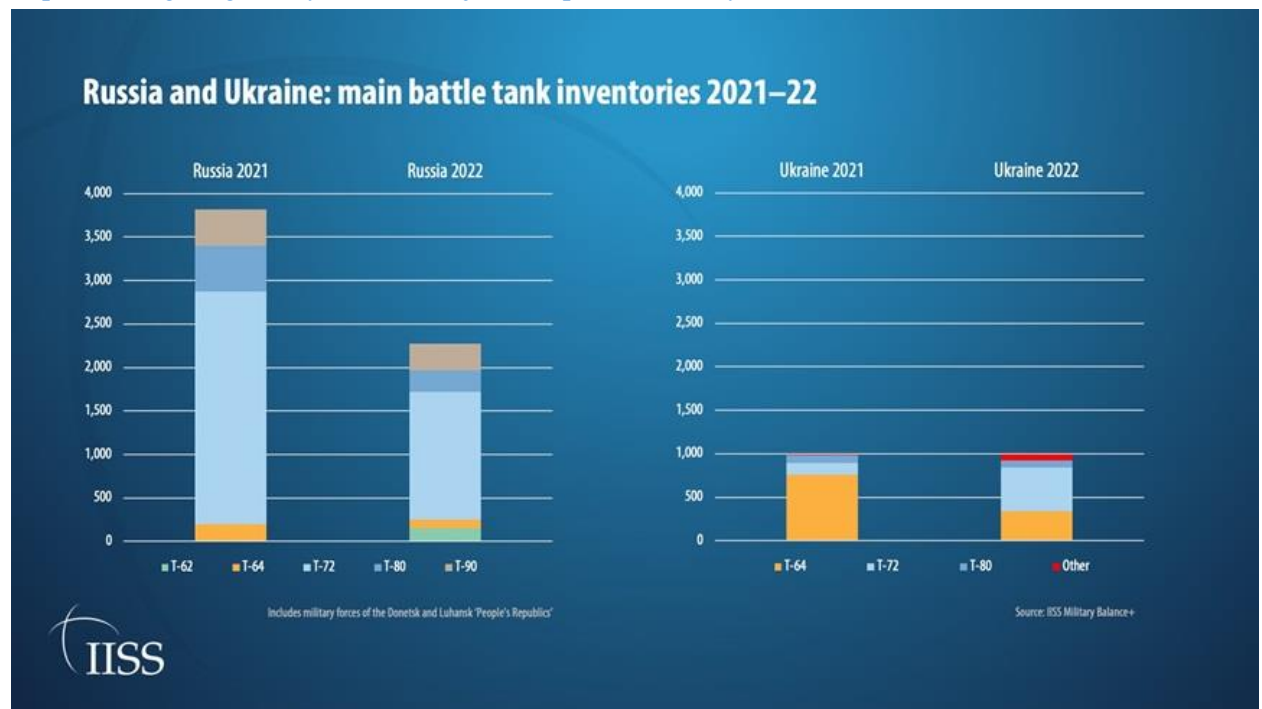
- On 09 February 2023, Wagner Group head Yevgeny Prigozhin stated that Wagner had halted its prisoner recruitment scheme.
- Data from the Russian Federal Penal Service had already suggested a drop-off in the rate of prisoner recruitment since December 2022. News of the harsh realities of Wagner service in Ukraine has probably filtered through to inmates and reduced the number of volunteers. However, a key factor in the termination of the scheme is likely increasingly direct rivalry between the Russian Ministry of Defence and Wagner.
- In addition, the regular Russian military has likely now also deployed the vast majority of the reservists called up under 'partial mobilisation'. The Russian leadership faces the difficult choice of either continuing to deplete its forces, scale back objectives, or conduct a further form of mobilisation.

## INTELLIGENCE UPDATE

- Over the past two weeks, Russia has likely suffered its highest rate of casualties since the first week of the invasion of Ukraine.
- The Ukrainian General Staff release daily statistics on Russian casualties. Although Defence Intelligence cannot verify Ukraine’s methodology, the trends the data illustrate are likely accurate. The mean average for the last seven days was 824 casualties per day, over four times the rate reported over June-July 2022. Ukraine also continues to suffer a high attrition rate.
- The uptick in Russian casualties is likely due to a range of factors including lack of trained personnel, coordination, and resources across the front – this is exemplified in Vuhledar and Bakhmut.



((Tendar))) @Tendar 15 Feb tweeted: According the International Institute for Strategic Studies (IISS) Russia lost around 50% of its pre-invasion fleet of modern T-72B3s and T-72B3M main battle tanks. The inventory of T-80BV/U tanks is estimated to have been reduced by even two-thirds.  
<https://iiss.org/blogs/analysis/2023/02/john-chipmans-military-balance-launch-event-remarks>





**CANADIAN FORCES INTELLIGENCE COMMAND**  
 COMMANDEMENT DU RENSEIGNEMENT DES FORCES CANADIENNES

**RUSSIA'S CLAIM:**

Russia denies that it is employing Iranian-sourced drones in its war against Ukraine.

**BASED ON CANADIAN FORCES INTELLIGENCE COMMAND ANALYSIS:**

- Russian forces have used Iranian systems for both battlefield surveillance and for one-way-attacks against Ukraine's critical infrastructure.
- Russia has become increasingly reliant on these drones as it has expended a significant proportion of its domestically produced long-range munitions and struggles to maintain adequate battlespace awareness.
- Ukrainian air defences have performed well against these systems. Ukrainian crews are effectively employing air defence platforms donated by international partners to intercept the majority of one-way attacks.

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National  
Defence



Défense  
nationale

## INTELLIGENCE UPDATE

- On 09 February 2023, Deputy Security Council Chairman Dmitry Medvedev called for an increase in Russian tank production while visiting the Omsk Transport Machine Construction plant. This follows several public comments by President Putin urging the defence industry to better support the 'special military operation'.
- In a televised meeting on 12 January 2023, Putin castigated Denis Manturov, the deputy prime minister with responsibility for the defence industry, for 'fooling around'; one of the president's strongest public outbursts since the invasion.
- Senior Russian leaders are likely aware that the state's military industrial output is becoming a critical weakness, exacerbated by the strategic and operational miscalculation of invading Ukraine. Production is almost certainly falling short of the Russian MoD's demands to resource the Ukraine campaign and restore its longer-term defence requirements.

## INTELLIGENCE UPDATE

- The Russian Aerospace Forces (VKS) continue to deploy a similar number of aircraft in support of the Ukraine operation as they have for many months. Russian sortie rates have increased over the last week, following several weeks of quieter activity. Air activity is now roughly in line with the average daily rate seen since summer 2022.
- Overall, Russian air power continues to significantly underperform in the war, constrained by a continued high threat from Ukrainian air defences and dispersed basing due to the threat of strikes against Russian airfields. Russian combat jets operate almost exclusively over Russian-held territory, preventing them from carrying out their key strike role effectively.
- Across Russia, the VKS likely maintains a largely intact fleet of approximately 1,500 crewed military aircraft, despite losing over 130 since the start of the invasion. However, it is unlikely that the VKS is currently preparing for a dramatically expanded air campaign as under the current battlefield circumstances it would likely suffer unsustainable aircraft losses.

PadawanPlanner @tc\_quinn07 12 Feb tweeted: Cancelling “OIE” as a term may have caused some confusion as some were finally getting used to it. I suggest more read up on MCDP 8 and use that terminology. For those who don’t read good, here’s a picture.

<https://marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/3077947/mcdp-8-information/>

See memo about Cancellation of the January 2020 Marine Corps Joint Memorandum on Definitions for Information Related Terms at [https://twitter.com/PAO\\_kaylahaas/status/1620784325561290752](https://twitter.com/PAO_kaylahaas/status/1620784325561290752).

BLUF: The U.S. Marine Corps has decided to rescind operations in the information environment (OIE) as a formal Marine Corps doctrinal term.



No snow this winter in NS.  
Balloons shot down.  
Monday we get 30 cm.  
Coincidence..? I think not.  
These balloons are controlling the weather.  
**STOP SHOOTING THEM DOWN..!**

